

## ABSTRACT

Chimeric carbohydrates produced by recombinant microorganism carrying exogenous glycosyl transferases act with or without exogenous enzymes required for synthesis or nucleotide synthesis precursors. These recombinant microorganism can be used as a means for competitively inhibiting the binding of toxins or adhesins to receptors of mucosal surfaces, especially gastrointestinal surface. In particular chimeric sugar moieties have been made for lipopolysaccharides, in recombinant microorganism that present multiple copies of the oligosaccharides. The oligosacchide moieties so presented act as receptor mimic for toxins and adhesins. A number have been synthesise and have been shown to confer protection against attack by pathogenic organisms or their products *in vitro* and an *in vivo*.

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